

a [having] network hub switching center; [means for routing communications from and to a plurality of subscriber units comprising:]

subscriber units dispersed at various locations within a predetermined [base station] geographic area, said subscriber units including switching means for selecting a communication path within said [interactive data broadcast] network,

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local base station repeater cell [means for] communicating with identified individual subscriber units within a local base station geographic area associated with said local base station repeater cell [means], said local base station repeater cell [means] further comprising,

base station data processing and communication unit [transmission means] for transmitting to a set of said [local] subscriber units contained within said local base station geographic area associated with said local base station repeater cell [means] and receiving from a subset of said [local] set of local subscriber units multiplexed synchronously related digital data messages of variable lengths for point-to-point communication between said local base station repeater cell [means] and said subset of said local subscriber units,

reception [means] for receiving and processing data messages from said set of local subscriber units comprising a local remote receiver disposed within one of a plurality of

cell subdivision sites partitioned from said local base station geographic area associated with said local base station repeater cell [means], said plurality of cell subdivision sites dispersed over said local base station geographic area, said [each] local remote receiver [adapted for receiving-only] being adapted to receive low power digital messages transmitted from said local subscriber units within range of said local remote receiver,

*Ar*  
[a set of local] said set of local subscriber [transceiver] units including low power mobile units located within said local base station geographic area, each of said local subscriber [transceiver] units adapted to communicate with said local base station repeater cell [means] by way of digital data signals of variable lengths synchronously related to a base station broadcast signal and timed for multiplexed message transmission, and

a modem [means] communicatively coupled to said local subscriber units and said local base station repeater cell [means] for transferring said multiplexed synchronously related digital data messages of variable lengths between said set of local subscriber units and said local base station repeater cell [means when] if said local subscriber units are unable to [communicate] directly communicate with said local base station repeater cell [means].

2. (Amended) The base station configuration of Claim 1 wherein said modem [means] and said local subscriber units are communicatively coupled via an rf link.

92 3. (Amended) The base station configuration of Claim 2 wherein said rf link between said modem [means] and said local subscriber units is at an rf carrier frequency of approximately 218-219 MHz.

4. (Amended) The base station configuration of Claim 1 wherein said modem [means] and said local base station repeater cell [means] are communicatively coupled via a telephone line.

93 6. (Amended) The communication method of Claim <sup>5</sup>~~26~~ [5] wherein the step of transmitting said second outgoing data signal [data] from said [a] local base station repeater cell to said [a] modem further comprises transmitting said second outgoing data signal [said data] from said local base station repeater cell to said modem via a telephone line.

7. (Amended) The communication method of Claim <sup>5</sup>~~26~~ [5] wherein the step of transmitting said third outgoing data signal [data] from said [a] modem to said [a] subscriber unit further comprises transmitting said third outgoing data signal [data] from said modem to said subscriber unit via an rf link.

<sup>8</sup>  
~~9.~~ (Amended) The communication method of Claim <sup>7</sup>~~8~~  
wherein the step of transmitting said third outgoing data  
signal [data] from said modem to said subscriber unit via an  
rf link further comprises transmitting said third outgoing  
data signal [data] from said modem to said subscriber unit at  
an rf carrier frequency of approximately 218-219 MHz.

<sup>9</sup>  
~~10.~~ (Amended) The communication method of Claim <sup>5</sup>~~26~~  
[6] wherein the step of transmitting said third incoming data  
signal [response] from said subscriber unit to said modem  
further comprises transmitting said third incoming data signal  
[data] from said subscriber unit to said modem via an rf link.

<sup>10</sup>  
~~11.~~ (Amended) The communication method of Claim <sup>9</sup>~~10~~  
wherein the step of transmitting said third incoming data  
signal [response] from said subscriber unit to said modem via  
an rf link further comprises transmitting said third incoming  
data signal [response] from said subscriber unit to said modem  
at an rf carrier frequency of approximately 218-219 MHz.

<sup>11</sup>  
~~12.~~ (Amended) The communication method of Claim <sup>5</sup>~~26~~  
[6] wherein the step of transmitting said fourth incoming data  
signal [response] from said modem to said local base station  
repeater cell further comprises transmitting said fourth  
incoming data signal [response] from said modem to said local  
base station repeater cell via a telephone line.

<sup>12</sup>  
~~13.~~ (Amended) A digital cellular communication system comprising in combination: [,]

a cell site divided into a plurality of subdivided zones,

a plurality of subscriber units with identity numbers based in said cell site,

Q3 a cell site communication system including a digital transmitter for communication with individual identified subscriber units geographically located within [the] said cell site,

a set of receive only digital receivers positioned in said subdivided zones, each said digital receiver being coupled by a transmission link with [the] said cell site communication system to relay received digital communications, [and]

a set of said subscriber units comprising portable wireless digital communication units with a limited power digital transmitter having a transmitting power for transmissions within [the area of the] said subdivided zones, [and]

a receiver for reception of digital messages from said cell site digital transmitter,

a modem [means] communicatively coupled to said local subscriber units and said digital transmitter for transferring data between said subscriber units and said

digital transmitter [when] if said subscriber units are unable to communicate directly with said digital transmitter.

<sup>13</sup>  
~~14.~~ (Amended) A two-way communication system [for an interactive data broadcast network] comprising:

at least one subscriber unit disposed within a predetermined base station geographic area, said at least one subscriber unit including switching means for selecting a communication path within said [interactive data broadcast network] communication system,

a network hub switching center [means] for routing communications from and to said at least one subscriber unit, and

a modem [means] communicatively coupled to said at least one subscriber unit and said network hub switching center [means] for transferring multiplexed synchronously related digital data messages of variable lengths between said at least one subscriber unit and said network hub switching center if [means when] said at least one subscriber unit is unable to communicate directly with a local base station repeater cell, said modem [means] also adapted for communicating with said [a] local base station repeater cell if communication therebetween is not otherwise prevented [when a local base station repeater cell becomes available].

<sup>14</sup>  
<sup>13</sup> ~~15~~. (Amended) The base station configuration of Claim ~~14~~ wherein said modem [means] and said at least one subscriber unit are [is] communicatively coupled via an rf link.

<sup>15</sup>  
<sup>14</sup> ~~16~~. (Amended) The base station configuration of Claim ~~15~~ wherein said rf link between said modem [means] and said at least one subscriber unit are [is] at an rf carrier frequency of approximately 218-219 MHz.

<sup>16</sup>  
<sup>13</sup> ~~17~~. (Amended) The base station configuration of Claim ~~14~~ wherein said modem [means] and said network hub switching center [means] are communicatively coupled via a telephone line.

<sup>18</sup>  
~~20~~. (Amended) The communication method of Claim <sup>17</sup> ~~21~~ [18] wherein the step of transmitting said first outgoing data signal [data] from said [a] network hub switching center to said [a] modem further comprises transmitting said first outgoing data signal [said data] from said network hub switching center to said modem via a telephone line.

<sup>19</sup>  
<sup>17</sup> ~~21~~. (Amended) The communication method of Claim ~~21~~ [18] wherein the step of transmitting said second outgoing data signal [data] from said [a] modem to said [a] subscriber unit further comprises transmitting said second outgoing data

signal [said data] from said modem to said subscriber unit via an rf link.

<sup>20</sup>  
~~22.~~ (Amended) The communication method of Claim <sup>19</sup>~~21~~ wherein the step of transmitting said second outgoing data signal [said data] from said modem to said subscriber unit via an rf link further comprises transmitting said data from said modem to said subscriber unit at an rf carrier frequency of approximately 218-219 MHz.

94  
<sup>21</sup>  
~~23.~~ (Amended) The communication method of Claim <sup>17</sup>~~27~~ [19] wherein the step of transmitting said first incoming data signal [response] from said subscriber unit to said modem further comprises transmitting said first incoming data signal [data] from said subscriber unit to said modem via an rf link.

<sup>22</sup>  
~~24.~~ (Amended) The communication method of Claim <sup>21</sup>~~23~~ wherein the step of transmitting said first incoming data signal [response] from said subscriber unit to said modem via an rf link further comprises transmitting said first incoming data signal [response] from said subscriber unit to said modem at an rf carrier frequency of approximately 218-219 MHz.

<sup>23</sup>  
~~25.~~ (Amended) The communication method of Claim <sup>17</sup>~~27~~ [19] wherein the step of transmitting said second incoming data signal [response] from said modem to said network hub



Q4 switching center further comprises transmitting said second incoming data signal [response] from said modem to said network hub switching center via a telephone line.

[ Please add the following new claims.

<sup>5</sup>  
~~--26.~~ A method of communicating between subscriber units and a local base station repeater cell comprising the steps of:

determining whether a subscriber unit located within a base station geographic area associated with said local base station repeater cell is receiving a signal from said local base station repeater cell;

Q5 if said subscriber unit is receiving a signal from said local base station repeater cell, performing the steps of:

transmitting outgoing data from said local base station repeater cell to said subscriber unit by directly transmitting a first outgoing data signal representative of said outgoing data from said local base station repeater cell to said subscriber unit, and

transmitting incoming data from said subscriber unit to said local base station repeater cell by transmitting a first incoming data signal representative of said incoming data from said subscriber unit to a receive only receiver unit and then transmitting a second

incoming data signal also representative of said incoming data from said receiver unit to said local base station; and

if said subscriber unit is not receiving a signal from said local base station repeater cell, performing the steps of:

transmitting said outgoing data from said local base station repeater cell to said subscriber unit by transmitting a second outgoing data signal representative of said outgoing data from said local base station repeater cell to a modem and then transmitting a third outgoing data signal also representative of said outgoing data from said modem to said subscriber unit, and

transmitting said incoming data from said subscriber unit to said local base station repeater cell by transmitting a third incoming data signal representative of said incoming data from said subscriber unit to said modem and then transmitting a fourth incoming data signal also representative of said incoming data from said modem to said local base station.

17

27. A method of communicating between a subscriber unit and a network hub switching center in a two-communication system comprising the steps of:

determining whether a subscriber unit located with a base station geographic area associated a said local base

25

station repeater cell is receiving a signal from said local base station repeater cell;

if said subscriber unit is receiving a signal from said local base station repeater cell, performing the steps of:

transmitting outgoing data from said network hub switching center to said subscriber unit via said local base station repeater cell, and

95 transmitting incoming data from said subscriber unit to said network hub switching center via said local base station repeater cell; and

if said subscriber unit is not receiving a signal from said local base station repeater cell, performing the steps of:

transmitting said outgoing data from said network hub switching center to said subscriber unit by transmitting a first outgoing data signal representative of said outgoing data from said network hub switching center to a modem and transmitting a second outgoing data signal also representative of said outgoing data from said modem to said local base station repeater cell, and

transmitting incoming data from said subscriber unit to said network hub switching center by transmitting a first incoming data signal representative of said incoming data from said subscriber unit to said modem and transmitting a second incoming data signal also

95 representative of said incoming data from said modem to said network hub switching center.--

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Upon entry of this amendment, claims 1-4, 7-17 and 20-27 will be pending in the present application. Claims 5, 6, 18 and 19 have been cancelled and claims 26 and 27 have been added.

Applicant notes with appreciation the Examiner's indication that claims 1-4 and 14-17 would be allowable if rewritten to overcome the rejection of these claims under Section 112, second paragraph. As discussed below, the above amendments to the claims overcome this rejection. Thus, claims 1-4 and 13-17 are in condition for allowance.

The disclosure stands objected to for failing to indicate the status of co-pending application Serial No. 07/966,414 in the Specification. Applicant submits the amendments to the Specification corrects this deficiency by indicating that the '414 application issued as U.S. Patent No. 5,388,101. Accordingly, applicant respectfully requests that the objection to the disclosure be withdrawn.